

NOTE ON A TRIASSIC FISH FOSSIL FROM LEIGH CREEK,
SOUTH AUSTRALIA

By R. T. WADE

(Communicated by S. B. Dickinson)

[Read 13 November 1952]

567 (942-17)

SUMMARY

A fragment of a fossil fish of undetermined affinities for which a new genus and species, *Leighiscus hillsi*, are created is described from the Trias of Leigh Creek. It is the first Triassic fish to be recorded from South Australia.

Order indet.

Family indet.

Genus *Leighiscus* gen. nov.

Generic characters determinable from the caudal region only. Tail abbreviate-heterocercal, advancing towards homocercy, with upper fleshy lobe greatly reduced; neural and haemal spines slender rods with slightly expanded proximal heads. Lower part of tail with strap-like haemal elements. Vertebral centra unossified; fin rays having long proximal unjointed segments, distally divided and jointed; scales very thin.

Type species *Leighiscus hillsi* sp. nov.

Leighiscus hillsi gen. et sp. nov.

Holotype—Tate Collection, University of Adelaide, caudal fragment in counterpart. Reg. No. P2070.

Remarks—The specimen in counterpart is preserved in fine mudstone as a laterally compressed caudal region which is stained by oxide of iron.

Except that it is clearly not a Palaeoniscid, or Teleost, its systematic position cannot be determined. Because, however, it is the first Triassic fish reported from S. Australia it is necessary to record its occurrence. Its state of preservation and the nature of the matrix suggest that deposits at Leigh Creek might be worked hopefully and profitably.

Description—The fragment preserved is the caudal region which extends from behind distal fragments of the last dorsal fin and the last few rays of the anal fin. Length to the base of the upper produced lobe is 90 mm., depth at the origin of the caudal fin is 40 mm. and at the preserved part of the anal fin 45 mm., so that a fairly slender fish is suggested.

The *tail* is abbreviate-heterocercal, with the upper fleshy lobe greatly reduced and probably quite short although its tip is not on the specimen.

Of the *endoskeleton*, the neural and haemal spines are preserved as casts filled with oxide of iron. Eight of the neural spines are easily observed as slender rods with slightly expanded proximal heads, and are on average about 12 mm. long. About eight or ten anterior haemal spines are similar in appearance to the neurals but a little longer and set more obliquely in the body. These are succeeded by about twelve haemal elements which are considerably flattened perhaps or expanded greatly distally. There are obscure indications of supports beneath the preserved dorsal and anal rays.

The *fins* are incompletely and imperfectly preserved. Of the dorsal fin, which seems to have been in advance of the anal, there are three fragments

